

 $\sqrt{}$

IW

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage, as priority/first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450,

Alexandria, VA, on October 7, 2005

ELENA M. CUTHBERTSON

PATENT APPLICATION IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN THE APPLICATION OF

MOTOHIRO YAMAHARA, ET AL.

10. 10/201 010

EXAMINED. LINKNO

SERIAL NO.: 10/521,843

EXAMINER: UNKNOWN

DOCKET NO.: SHARP-2

FILED: JANUARY 18, 2005

ART UNIT: UNKNOWN

TITLE: DENDRITIC POLYMER AND ELECTRONIC DEVICE ELEMENT

EMPLOYING THE POLYMER

WILMINGTON, DE DATE: October 7, 2005

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendments Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In compliance with the applicants' duty of disclosure under 37 CFR 1.56, and the requirements of 37 CFR 1.97 and 1.98, and to aid in the search and examination of the above identified application, the applicants note and enclose a copy of each of the following references:

Yamamoto, et al. Japanese Patent Application Laid-Open No. 07-126616 Hitachi, Ltd., et al. Japanese Patent Application Laid-Open No. 08-018125 Cambridge, et al. Japanese Patent Application Laid-Open No. 10-092576 Mitsubishi Japanese Patent Application Laid-Open No. 63-076378 Mitsubishi Japanese Patent Application Laid-Open No. 2000-336171 Res Dev Corp. Japanese Patent Application Laid-Open No. 04-133351 Mitsubishi Japanese Patent Application Laid-Open No. 05-110069 Matsushita Japanese Patent Application Laid-Open No. 07-206599 Tosoh Japanese Patent Application Laid-Open No. 10-310561

Applicant: Motohiro Yamahara, et al.

Serial No.: 10/521,843 Filing Date: January 18, 2005

Pg. 2

Stanley Elec.

Japanese Patent Application Laid-open No. 09-059355

Samuel, et al.

WO 99/21935

Synthesis, Light Emission, and Optical Limiting of Hyperbranced Poly[Phenylene-alt-(2,5-Thienylene)s], Luo, J. et al., Polymer Preprints, vol.42, no,2, 2001, pgs. 527-528, XP009020396.

Poly(Amidoamine)(Pamam) Dendrimers: From Biomimicry to Drug Delivery and Biomedical Applications, Esfand, R., et al., Drug Discovery Today, Elsevier Science Ltd, GB, vol.6 no. 8, April 2001 (2001-04), pgs. 427-436, XP001029831 ISSN: 1359-6446.

Pentacene-Based Organic Thin-film Transistors, Yen-Yi Lin et al., IEEE Transactions on Electron Devices, vol. 44, No. 8 p. 1325-1331 (1997)

Electrically Conducting Dendrimers, L.L. Miller, et al.; J. Am. Chemistry Society, vol. 119, p. 1005-1010 (1997)

Masaaki Kakimoto, Chemistry, vol. 50, p. 608-612 (1995)

Dendritic Macromolecules, Masaaki Kakimoto, Kobunshi (High Polymers, Japan) vol. 47, p. 804-807 (1998)

Conducting Polymer and Its Electronically and Optically Functional Devices, Katsumi Yoshino, Mitsuyoshi Onoda, Polymer Electronics, Japan, Corona, p. 32. (1996)

Dodensei Kobunshi No Kiso To Oyo, Base and applications Conductive Polymers, IPC, p. 24

Starburst Molecules for Amorphous Molecular Materials, Shirota, Kobata, and Noma, Chemistry Letters, p. 1145-1148 (1989)

Palladium-Catalyzed Cross-Coupling Reactions of Aryl and Vinylic Boron Compounds with Organic Halides, Miyaura and Suzuki, Yuki Gosei Kagaku Kyokai Shi, Journal of Synthetic Organic Chemistry, Japan, vol. 46, p. 848 - 860 (1988)

Palladium-Catalyzed Cross-Coupling Reactions of Organoboron Compounds, Miyaura and Suzuki, Chemistry Rev., vol. 95, pgs. 2457-2483 (1995)

Recent Advances in the Cross-Coupling Reactions of Organoboron Derivatives with Organic Electrophiles, Suzuki, Journal of Organometallic Chemistry, vol. 576, pgs. 147-168 (1999) Applicant: Motohiro Yamahara, et al.

Serial No.: 10/521,843 Filing Date: January 18, 2005

Pg. 3

English abstracts or concise English language explanations of each of the above patent publications are also enclosed along with a copy of PTO form 1449.

Respectfully submitted,

Donald W. Huntley
Attorney for Applicants
Registration No. 24,673

emc

Enclosures

 $L:\clients\c Kurihara\c Sharp-2\c documents\c IDSB.doc$

PTO/SB/08A (08-03)

Approved for use through 07/31/2006, OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE of the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Sheet 1

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

of 2

Complete if Known				
Application Number	10/521,843			
Filing Date	January 18, 2005			
First Named Inventor	Motohiro Yamahara			
Art Unit				
Examiner Name				
Attorney Docket Number	Sharp-2			

U. S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
-		Number-Kind Code ^{2 (F known)} US-			Figures Appear	
		05-				
		US-				
		US-				
		US-				
_	-	US-				
		US-				
-		US-				
-		US-				
		US-		· · · · · · · · · · · · · · · · · · ·		
		US-				
		US-				
	,	US-				
		US-				
		US-				
	-	US-				
		US-	+			
		US-	 -			
		US-				
		US-			· · · · · · · · · · · · · · · · · · ·	

		FORE	IGN PATENT DOCL	IMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code ³ "Number ⁴ "Kind Code ⁵ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	T ⁶
		JP-07-126616	05-16-1995	Yamamoto Ryuich		
		JP-08-018125	01-19-1996	Hitachi, Ltd		
		JP-10-092576	04-10-1998	Cambridge Displ		
		JP-63-076378	04-06-1988	Mitsubishi Elec		
		JP-2000-336171	12-05-2000	Mitsubishi Chem		
		JP-04-133351	05-07-1992	Res Dev Corp of		

Examiner	/Dug Teropa/	Date	04/23/2009
Signature	/Duc Truong/	Considered	07/20/2000

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form	1449/PTO		Co	mplete if Known
	_		Application Number	10/521,843
INFORM	ATION D	ISCLOSURE	Filing Date	January 18, 2005
_			First Named Inventor	Motohiro Yamahara
		APPLICANT	Art Unit	
(Use as many sheets as necessary)			Examiner Name	
Shoot 2	of	2	Attorney Docket Number	Sharn-2

U. S. PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant	
		Number-Kind Code ^{2 (if known)}	<u></u>	•	Figures Appear	
		US-				
		US-				
		US-				
		US-	 			
		US-	 			
		US-				
	 	US-				
	-	US-		***		
		US-				
		US-				
		US-				
		US-				
		US-	MC			
		US-				
	-	US-				
		US-				
		US-				
		US-				
		US-				

Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)	MM-DD-YYYY	7 ppilodit of Oiled Boodineit	Or Relevant Figures Appear	Τ,
		JP-05-110069	04-30-1993	Mitsubishi Elec		
		JP-07-206599	08-08-1995	Matsushita Elec		
		JP-10-310561	11-24-1998	Tosoh Group		Г
		JP-09-059355	03-04-1997	Agency of IND S		
		WO 99/21935	05-06-1999	Isis Innovation		

Examiner	/Duc Truona/	Date	04/00/0000
Signature	/Dub Fridorig/	Considered	04/23/2009

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08B (08-03) Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitu	ite for form 1449/PTO			Complete if Known			
				Application Number	10/521,843		
INF	ORMATION	I DIS	CLOSURE	Filing Date	January 18, 2005		
STA	TEMENT E	BY A	PPLICANT	First Named Inventor	Motohiro Yamahara		
	(Use as many she	note as w		Art Unit			
	Ose as many sne	ets as r	ecessary)	Examiner Name			
Sheet	1	of	2	Attorney Docket Number	Sharp-2		

Under the Panerwork Reduction Act of 1995, no persons are required to

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
		LUO, PENG, CHENG, ZHONG TANG, Synthesis, Light Emission, and Optical Limiting of Hyperbranced Poly[Phenylene-alt-(2,5-Thienylene)s], Polymer Preprints, 2001, p. 527-528.	
		ESFAND, TOMALIA, Poly(Amidoamine)(Pamam) Dendrimers: From Biomimicry to Drug Delivery and Biomedical Applications, Drug Discovery Today, April 8, 2001,p.427-436, Vol. 6, No. 8	
· · ·		LIN, GUNDLACH, NELSON, JACKSON, Pentacene-Based Organic Thin-film Transistors, IEEE Transctions on Electron Devices, August 8, 1997, p1325-1331, Vol 44, No. 8.	
		MILLER, DUAN, TULLY, TOMALIA, Electrically Conducting Dendrimers, Journal American Chemistry Society,1997, p. 1005-1010, Vol.119, No. 5.	
		KAKIMOTO, Chemistry, 1995, p. 608-612, Vol. 50.	
		KAKIMOTO, Dendritic Macromolecules, Kobunshi High Polymers,1998, p.804-807, Vol. 47. Japan.	
·		YOSHINO, ONODA, Conducting Polymer and Its Electronically and Optically Functional Devices, Polymer Electronics, 1996, p.32, Corona, Japan.	
		Dodensei Kobunshi No Kiso To Oyo,Base and Applications Conductive Polymers, p. 24 IPC, Japan. 1963	
		SHIROTA,KOBATA,NOMA, Starburst Molecules for Amorphous Molecular Materials, Chemistry Letters, 1989, p. 1145-1148.	_
		MIYAURA, SUZUKI, Yuki Gosei Kagaku Kyokai Shi, Palladium-Catalyzed Cross-Coupling Reactions of Aryl and Vinylic Boron Compounds with Organic Halides, Journal of Synthetic Organ	

	· · · · · · · · · · · · · · · · · · ·		
Examiner	/Duc Truong/	Date	04/23/2009
Signature		Considered	0 1/25/2000

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

PTO/SB/08B (08-03)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitu	Substitute for form 1449/PTO			Complete if Known		
				Application Number	10/521,843	
INF	ORMATION	DIS	CLOSURE	Filing Date	January 18, 2005	
STA	TEMENT E	BY A	PPLICANT	First Named Inventor	Motohiro Yamahara	
	(Usa as many char	oto oo n		Art Unit		
	(Use as many sheets as necessary)			Examiner Name		
Sheet	2	of	2	Attorney Docket Number	Sharp-2	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	miner Cite Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate),		T²
		MIYAURA, SUZUKI, Palladium-Catalyzed Cross-Coupling Reactions of Organoboron Compounds, Chemistry Rev., 1995, p. 2457-2483, Vol 95, No. 7	
		SUZUKI, Recent Advances in the Cross-Coupling Reactions of Organoboron Derivatives with Organic Electrophiles1995-1998, Journal of Organometallic Chemistry, 1999, pgs.147-168	
115 116			

Examiner	/Duc Truona/	Date	04/23/2009
Signature		Considered	5-7-E0/E050

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.